Abstract

METHOD FOR CONNECTING AN INTEGRATED CIRCUIT TO A SUBSTRATE AND CORRESPONDING CIRCUIT ARRANGEMENT

An integrated circuit, in particular from a chip, a wafer or a hybrid, to a substrate. A package is provided for the integrated circuit, which has a connection side, on which there are provided a plurality of connection regions for connection to the substrate. A corresponding plurality of connection regions are provided on the substrate, and elevated contact regions are provided on the connection regions of the package and/or connection regions of the substrate. The elevated contact regions include a first group of contact regions and a second group of contact regions. A connection of the package to the substrate is created via the elevated contact regions. The elevated contact regions configured such that the first group of contact regions form a rigid connection and the second group of contact regions form elastic connection between the package and the substrate. The invention likewise provides corresponding circuit arrangement.

List of reference symbols

	100	Circuit substrate
	20	Encapsulation
5	110,150,	
	140,150′	Connection regions
	7	Lines
	8	Adhesive composition
	AS	Connection side
10	VS	Front side
	RS	Rear side
	5	Chip
	10	Adhesive layer
	15	Interposer
15	30	Solder balls
	35	Plastic elements
	6	Contact pads
	38	Metalization
	IR	Near region
20	OR	Far region
	1a,1b,	•
	1a′,1b′,	
	1c′	Package including chip
	NP	Neutral point
25	ST	Stress
	V	Flexure effect
	39	Solder
	150′′	Interconnect
	25	Dielectric
30	120 s	Solder resist layer